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EXAMINER

CUMMING, WILLIAM D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2683 | |

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,858

Applicant(s)

MICHAEL GEILE

Examiner

WILLIAM D CUMMING

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

2. Waiver of the Copy Requirement in 37 CFR 1.98 for Cited Pending U.S. Patent Applications

37 CFR 1.98 requires that for each cited pending U. S. patent application, an information disclosure statement (IDS) include a legible copy of the application specification, including the claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims, directed to that portion. See 37 CFR 1.98(a)(2)(iii).

The United States Patent and Trademark Office (USPTO) has been scanning newly filed patent applications and the existing inventory of patent applications into USPTO's Image File Wrapper (IFW) system since June of 2003. See Notification of United States Patent and Trademark Office Patent Application Records being Stored and Processed in Electronic Form, 1271 Off. Gaz. Pat. Office 100 (June 17, 2003). Applications stored in the IFW system may be viewed by examiners on their desktop computers. Consequently, there is no longer a need to require a copy of the specification, including claims, and drawings of a U.S. patent application (or portion of the application) listed on an IDS when the cited application is stored in the USPTO's IFW system, and can be readily viewed by examiners, applicants and members of the public.

Therefore, the requirement in 37 CFR 1.98(a)(2)(iii) for a legible copy of the specification, including the claims, and drawings of each cited pending U.S. patent application (or portion of the application which caused it to be listed) is *sua sponte* waived where the cited pending application is stored in the USPTO's IFW system. See 37 CFR 1.183. This waiver is effective immediately.

Applications filed under 35 U.S.C. § 111 on or after June 30, 2003, and international applications that have entered the national stage on or after June 30, 2003, have been or are being scanned into the USPTO's IFW system. When citing to a pending application filed under 35 U.S.C. § 111 before June 30, 2003, or that entered the national stage before June 30, 2003, the applicant may check the private Patent Application Information Retrieval (PAIR) System to see whether the application is stored in the USPTO's IFW system in order to determine if a copy of the application (or portion of the application) is required to be provided with an IDS. The private PAIR System can be accessed over the Office's Internet Web site (www.uspto.gov).

When citing to a pending U.S. patent application that has been published under 35 U.S.C. § 122(b) (eighteen-month publication), the USPTO prefers that the citation be to the patent application publication (by publication number) rather than to the application itself (by application number).

This waiver is limited to the specification, including the claims, and drawings in the U.S. application (or portion of the application). If material other than the specification, including the claims, and drawings in the file of a U.S. patent application is being cited in an IDS, the IDS must contain a legible copy of such material. See 37 CFR 1.98(a)(1)(iv).

Inquiries concerning this notice may be directed to Jeanne M. Clark, Senior Legal Advisor, Office of Patent Legal Administration, at (703) 306-5603.

Drawings

3. INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, is required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the a symbol mapper for converting the strings into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, wherein adjacent ones of the amplitude and phase values generally represent data strings having at least as few differences among the bits of their corresponding strings as do nonadjacent ones of the amplitude and phase values as stated by claim 1; a symbol mapper for converting the strings into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, wherein the constellation as rotationally asymmetric for valid ones of the data strings as stated by claim 5; the step of converting each string of digital data into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, wherein adjacent amplitude and phase values generally represent data strings having at least as few differences among the bits of their corresponding strings as do nonadjacent amplitude

and phase values as stated by claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

5. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
6. The drawings are objected to because some figures, like figures 41-46, are missing element numbers. Applicant must correct all drawings, mentioned or not.. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification inadequately describe and fails to originally support, as filed June 28, 1996, the now claimed the a symbol mapper for converting the strings into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, wherein adjacent ones of the amplitude and phase values generally represent data strings having at least as few differences among the bits of their corresponding strings as do nonadjacent ones of the amplitude and phase values as stated by claim 1; a symbol mapper for converting the strings into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, wherein the constellation as rotationally asymmetric for valid ones of the data strings as stated by claim 5; the step of converting each string of digital data into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, wherein adjacent amplitude and phase values generally represent data strings having at least as few differences among the bits of their corresponding strings as do nonadjacent amplitude and phase values as stated by claim 8. The "*written description*" of the invention required by first paragraph

of 35 USC §112 is separate and distinct from that paragraph's requirement of enabling disclosure, since description must do more than merely provide explanation of how to *"make and use"* the invention. Applicant must also convey, with reasonable clarity to those skilled in the art, that applicant, as of the filing date sought, was in possession of the invention, with the invention being, for purpose of *"written description"* inquiry, whatever is presently claimed. Drawings alone may, under proper circumstances, provide *"written description"* of the invention required by 35 USC §112, and whether the drawings are from design application or utility application is not determinative. In order to satisfy *"written description"* requirement of 35 USC §112, the proper test is whether drawings conveys, with reasonable clarity to those of ordinary skill in the art, the claim subject matter. The original specification, as filed June 28, 1996 states, *"The scrambled signals are applied to a symbol mapping fuction 136. The symbol mapping function 136 takes the input bits and maps them into a complex constellation point. For example, if the input bits are mapped into a symbol for output of a BPSK signal, every bit would be mapped to a single symbol in the constellation as in the mapping diagram for BPSK of FIG. 15. Such mapping results in in-phase and quadrature values (I/Q values) for the data. BPSK is the modulation technique preferably used for the upstream and downstream IOC channels and the synchronization channels. BPSK encoding is preferred for the IOC control data so as to provide robustness in the system as previously discussed. For QPSK modulation, every two bits would map into one of four*

complex values that represent a constellation point. In the preferred embodiment, 32 QAM is utilized for telephony payload data, wherein every five bits of payload data is mapped into one of 32 constellation points as shown in FIG. 14. Such mapping also results in I/Q values. As such, one DS0+ signal (10 bits) is represented by two symbols and the two symbols are transmitted using two carriers. Thus, one DS0+ channel is transported over two carriers or tones of 6 MHz spectrum."

And, "The transport architecture shall first be described with respect to downstream transmission and then with respect to upstream transmission. Referring to FIG. 37, the MCC modem 82 architecture of the HDT 12 will be described. In the downstream direction, serial telephony information and control data is applied from the CXMC 80 through the serial interface 236. The serial data is demultiplexed by demultiplexer 238 into parallel data streams. These data streams are submitted to a bank of 32 channel modems 226 which perform symbol mapping and fast Fourier transform (FFT) functions. The 32 channel modems output time domain samples which pass through a set of mixers 240 that are driven by the synthesizer 230. The mixers 240 create a set of frequency bands that are orthogonal, and each band is then filtered through the filter/combiner 228. The aggregate output of the filter/combiner 228 is then up-converted by synthesizer 242 and mixer 241 to the final transmitter frequency. The signal is then filtered by filter 232, amplified by amplifier 234, and filtered

again by filter 232 to take off any noise content. The signal is then coupled onto the HFC distribution network via telephony transmitter 14."

11. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to provide an enabling disclosure on how a symbol mapper for converting the strings into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, and then the symbol mapper with adjacent ones of the amplitude and phase values can generally represent data strings having at least as few differences among the bits of their corresponding strings as do nonadjacent ones of the amplitude and phase values as stated by claim 1? How can a symbol mapper for converting the strings into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, and then the constellation as rotationally asymmetric for valid ones of the data strings as stated by claim 5? The step of converting each string of digital data into a sequence of symbols representing a constellation of discrete values of the amplitude and phase of a carrier for a predetermined period, and also do the adjacent amplitude and phase values

generally represent data strings having at least as few differences among the bits of their corresponding strings as do nonadjacent amplitude and phase values as stated by claim 8?

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "*generally represent*" in claims 1 and 8 is indefinite since it is a term of degree which the specification or the claims fail to define.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

15. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

16. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 6 and 7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No.

6,510,229. Although the conflicting claims are not identical, they are not patentably distinct from each other because present claim method is and obvious method of operation of the apparatus of the patent.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dapper, et al disclose a poly-phase filters in multicarrier communication systems.

Geile, et al show a communication system with multicarrier telephony transport.

Brede, et al teach acquisition and tracking in communication system with multicarrier telephony transport.

Hill, et al exhibit a channel selection for a hybrid fiber coax network.

19. Replacement Notice: Copies of Patent Application Records will be Provided in both Electronic and Paper Form

The Official Gazette notice, published on August 24, 2004 entitled "*All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form*" (1285 Off. Gaz. Pat. Off, August 24, 2004) is hereby rescinded. The USPTO is reinstating, until further notice, the procedures in effect prior to July 30, 2004 for providing certified copies of patent application records with paper certification statements. The USPTO will also offer electronic certified copies of patent application records at the requester's option.

Certified Copies with Paper Certification

Unless otherwise requested, certified copies of patent application records provided pursuant to 37 CFR 1.19 (b) will be produced with a paper certification statement, continuing the practice in effect prior to July 30, 2004. The certification statement will include an embossed seal and original signature.

Certified Copies with Electronic Certification

Customers ordering certified copies of patent applications as filed or patent-related file wrapper and contents of published applications from the USPTO website will have the option to choose electronic copies with electronic certification. These files include an imaged certification statement as part of a PDF file containing the document TIFF images. These electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. Customers may choose to download these electronic files from the USPTO website or receive them on compact disc.

Paris Convention for the Protection of Industrial Property and Priority

Irrespective of whether the USPTO provides a paper certified copy or an electronic certified copy, Article 4(d)(3) of the Paris Convention prohibits any country that is a member of the convention from requiring further authentication of the certified copy for purposes of claiming priority under the Paris Convention. (The text of the Paris Convention and a list of its members are available at www.wipo.int/treaties/en/ip/paris/index.html.)

The USPTO is working with other intellectual property offices to encourage the acceptance of priority documents in electronic form with electronic certification. A list of offices and international intellectual property organizations that have agreed to accept electronic certified copies will be posted on the USPTO website soon, and updated regularly.

Questions should be directed to the Office of Public Records by email to opr@uspto.gov or by telephone at (703) 308-9743.

20. If applicants wish to request for an interview, an *"Applicant Initiated Interview Request"* form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed *"Applicant Initiated Interview Request"* form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

21. USPTO to Provide Electronic Access to Cited U.S. Patent References with Office Actions and Cease Supplying Paper Copies

Summary

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and U.S. patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited

references will continue to be provided by the USPTO for international applications under the PCT during the international stage.

Deployment of E-Patent Reference System

The USPTO will deploy the full E-Patent Reference program starting in June of 2004. In accordance with the schedule shown below, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions in the indicated Technology Centers (TCs). Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

Schedule

June 2004 TCs 1600, 1700, 2800 and 2900

July 2004 TCs 3600 and 3700

August 2004 TCs 2100 and 2600

Description of E-Patent Reference System

On December 1, 2003, the Office made available a new feature in the Office's Private PAIR system, E-Patent Reference, to allow convenient downloading and printing of cited U.S. patents and U.S. patent application publications. A notice announcing this system was published in the Official Gazette, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The same notice also announced the Office's future plan to cease supplying copies of cited U.S. patents and patent application publications with Office actions.

The E-Patent Reference system allows an authorized user of Private PAIR to download the U.S. patents and U.S. patent application publications cited on a form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants as part of an information disclosure statement (IDS) on form PTO/SB/08 (1449). The retrieval of some or all of the documents is performed in one downloading step with each of the documents encoded as Adobe Portable Document format (.pdf) files.

The E-Patent Reference system was used by applicants during a pilot program in December 2003 and January 2004. In response to some technical issues discovered by users, changes to make the system more compatible with users' firewalls and office systems were made during the pilot.

Consequently, applicants should expect to start receiving Office actions (in patent applications and during patent reexamination proceedings) without paper copies of cited U.S. patents and U.S. patent application publications in accordance with the schedule above. These documents will be available through the E-Patent Reference system for downloading using Private PAIR. Foreign patents and non-patent literature will continue to be provided to the applicant on paper. Communications from the Office during the international stage of an international application under the PCT will continue to include paper copies of all references, including U.S. patents and U.S. patent application publications.

In summary, all U.S. patents and patent application publications are available on the USPTO web site, from the Office of Public Records and from commercial sources. Additionally, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible.

Steps to Use the E-Patent Reference Feature

Access to Private PAIR is required to utilize E-Patent Reference. If you do not already have access to Private PAIR, the Office urges practitioners and applicants not represented by a practitioner to: (1) obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate; (2) obtain a USPTO customer number; (3) associate all of their pending and new application filings with their customer number; (4) install free software (supplied by the Office) required to access Private PAIR and the E-Patent Reference; and (5) make appropriate arrangements for Internet access.

Instructions for performing the 5 steps:

Step 1: Full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at: <http://www.uspto.gov/ebc/downloads.html>. Note that a notarized signature will be required to obtain a digital certificate.

Step 2: To get a Customer Number, download and complete the Customer Number Request form, PTO-SB/125, at: <http://www.uspto.gov/web/forms/sb0125.pdf>. The completed form can then be transmitted by facsimile to the Patent Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or agent, then your registration number must be associated with your customer number. This association is accomplished by adding your registration number to the Customer Number Request form.

Step 3: A description of associating a customer number with the correspondence address of an application is described at the EBC Web page at: http://www.uspto.gov/ebc/registration_pair.html.

Step 4: The software for electronic filing is available for downloading at www.uspto.gov/ebc. Users can also contact the EFS Help Desk at (703) 305-3028 and request a copy of the software on compact disc. Users will also need Adobe Acrobat Reader, which is available through a link from the USPTO web site.

Step 5: Internet access will be required which applicants may obtain through a supplier of their own choice. As images of large documents must be downloaded, high-speed Internet access is recommended.

The E-Patent Reference feature is accessed using a button on the Private PAIR screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents in the Portable Document Format (.pdf). The downloaded documents can be viewed and printed using Adobe's Acrobat Reader program and other software.

Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents and patent application publications for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide patents and patent application publications.

Section 707.05(a) of the Manual of Patent Examining Procedure, which currently provides that copies of cited references are in general automatically furnished without charge to applicant together with the Office action in which they are cited, will be revised in due course for consistency with the practice announced in this notice.

Comments

The Office published a notice announcing its plan to cease supplying copies of cited U.S. patent references with Office actions, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The Office received numerous comments in response to this notice. A summary of representative comments and the Office's responses to the comment, grouped by topics, follows:

Comment 1: The requirement to use the Office's customer number/digital certificate shifts the responsibility of producing paper copies to the applicant. A number of comments indicated that adopting the proposal would result in an increased responsibility for the applicant, as the applicant or applicant's representative would be required to print the references.

Response: The USPTO is implementing the E-Patent Reference program as part of the Office's e-Government initiative and to align funding priorities to the Patent Initiatives, including the hiring of examiners. Applicants can purchase copies of U.S. patents and patent application publications from a variety of vendors if they

choose not to print copies through the E-Patent Reference system.

The USPTO is moving toward electronic filing and processing of both patent applications and trademark applications. The policy announced in this notice is simply a step towards a more fully automated patent examination process. By analogy, briefs and court opinions that include case citations do not include paper copies of the cited cases. Rather, the cited cases are available via books or electronic databases. Similarly, the USPTO will no longer provide paper copies of U.S. patents and patent application publications since they are available electronically free of charge. Finally, this change will avoid duplication and waste since an applicant may not need to print out every page of a cited U.S. patent or patent application publication.

Comment 2: Adopting the proposal would hurt the solo practitioners and pro se applicants the most, which is unfair.

Response: The solo practitioners and pro se applicants have the same electronic access as the larger firms and corporations, available instantaneously over the Internet. If a solo practitioner or a pro se applicant chooses not to print copies of U.S. patents and patent applications publications through the USPTO Patents on the Web system or through the E-Patent Reference system, commercial sources that provide patents very quickly and inexpensively are available, and copies of U.S. patents and patent application publications are also available at the Patent and Trademark Depository Libraries (PTDLs). Additionally, the cost of patents if ordered from the USPTO Office of Public Records is very reasonable (\$3).

Comment 3: Some applicants indicated that the service is reliable and quick, and consistent with the electronic commerce initiatives in their law firms and businesses.

Response: As pointed out by some respondents, electronic copies of the references are very usable, available without mail delays, and capable of being sent to clients, other attorneys and experts by electronic means.

Comment 4: The statute 35 USC Sec. 132 requires the Office when sending a rejection to state the reasons "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application".

Response: The requirement that an Office action contain "such information and references as may be useful in judging of the propriety of continuing the prosecution of his application" was added to the patent laws in the Patent Act of 1870. The circumstances surrounding this provision reveal that it requires that an Office action identify the prior inventions or patents that are relied upon in making a rejection, not that it requires that an Office action be accompanied by copies of the cited references. The USPTO did not even begin providing copies of cited references with Office actions until 1965, when 35 U.S.C. Sec. 41 was amended to authorize (but not require) the USPTO to provide copies of patents cited in Office actions without charge. See 35 U.S.C. Sec. 41(e) ("[t]he Director may provide any applicant issued a notice under [35 U.S.C. Sec. 132] with a copy of the specifications and drawings for all patents referred to in that notice without charge") (emphasis added). Nevertheless, the Office will provide access to U.S. patents and patent application publications, albeit not in paper form.

Comment 5: A number of users suggested that the Office provide paper references at an extra cost.

Response: The Office of Public Records does offer that service, at a reasonable cost, and it is available through a number of delivery channels. See 37 CFR 1.19 (a). Commercial services also provide U.S. reference documents, in person, by mail, and over the Internet.

Comment 6: Some comments indicated that the length of the pilot should have been expanded.

Response: E-Patent Reference system will continue through the end of May to allow applicants to become familiar with E-Patent Reference and to be sure all technical concerns are addressed.

For Further Information Contact

Questions concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the Patent EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov. Questions about this notice may be directed to Jay Lucas, at Jay.Lucas@uspto.gov and Rob Clarke, at Robert.Clarke@uspto.gov. OG
Notices: 18 May 2004

22. Consolidated Appropriations Act, 2005 enacted on December 8, 2004

H.R. 4818, the Consolidated Appropriations Act, 2005 (Consolidated Appropriations Act) was signed by President George W. Bush and enacted into law on December 8, 2004. The Consolidated Appropriations Act revises certain patent application and maintenance fees; provides separate fees for a basic filing fee, a search fee, and an examination fee; and requires an additional fee for any patent application whose specification and drawings exceed 100 sheets of paper (application size fee). The new patent fees are now effective and will remain in effect during the remainder of fiscal year 2005 and during fiscal year 2006. The patent maintenance fee changes apply to any maintenance fee payment made on or after December 8, 2004, regardless of the filing or issue date of the patent for which the fee is submitted. The revised maintenance fees took effect on December 8, 2004. Thus, any maintenance fee paid at any time on (or after) December 8, 2004 is subject to the revised maintenance fee amounts set forth in the Consolidated Appropriations Act.

Note: If you are paying via the USPTO's Internet Web site, there will likely be a delay in updating the maintenance-fee information on the USPTO's Office of Finance On-Line Shopping Web page. Therefore, if paying on-line, please refer to the updated fee schedule to ensure that you include the appropriate updated fee amount. Maintenance fees must be timely paid in the appropriate amount to avoid expiration of a patent.

The new basic filing fee (or national fee), search fee, examination fee, and application size fee apply to national patent applications (other than provisional applications) filed on or after December 8, 2004, and to international patent applications in which the basic national fee is paid on or after December 8, 2004. The new provisional application filing fee applies to any provisional application filing fee paid on or after December 8, 2004. The filing fee (or national fee), search fee, and examination fee are due on filing. If the filing fee (or national fee) is paid on filing, but the search fee and/or examination fee is missing, the USPTO will issue a notice requiring that any missing search fee and examination fee (but no surcharge until further notice) be paid within a specified period of time in order to avoid abandonment. Thus, if at least the full basic filing fee under the Consolidated Appropriations Act is paid on or after December 8, 2004, the USPTO will issue a notice requiring any balance of the search fee and the examination fee (but no surcharge). The remaining patent application fee changes, including the excess claims fees, extension of time fees, and appeal fees, apply to any fee payment made on or after December 8, 2004, regardless of the filing date of the application for which the fee is submitted.

USPTO customers should monitor the USPTO's Internet Web site frequently for current patent fee information.

Payments from foreign countries must be payable and immediately negotiable in the United States for the full amount of the fee required.

23. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **WILLIAM D CUMMING** whose telephone number is

703-305-4394. The examiner can normally be reached on Monday 6:30am to 3:30pm,

Tuesday 2:30pm to 8:30pm and Wednesday 10:00am to 6:30pm.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **WILLIAM TROST** can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wdc



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PATENT AND
TRADEMARK OFFICE

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A handwritten signature of William Cumming is written over a rectangular stamp. The signature is in black ink and is stylized. The stamp contains the text "WILLIAM CUMMING" and "PRIMARY EXAMINER" in a bold, sans-serif font.

WILLIAM CUMMING
PRIMARY EXAMINER